

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Draft

**Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Kentucky Utilities Company-Ghent Station
Mailing Address: P.O. Box 32010 Louisville, KY 40232

Source Name: Kentucky Utilities Company
Mailing Address: P.O. Box 32010 Louisville, KY 40232

Source Location: U.S. Highway 42, Ghent, Kentucky 41045

Permit Number: V-05-043
Source A.I.#: 704
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Regional Office: Florence Regional Office
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Application
Complete Date: January 7, 2005
Issuance Date:
Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 01 (03)* - Unit 1 Indirect Heat Exchanger

* - Emission Point 03 will change to Emission Point 25 after installation of WFGD.

Description:

Unit 1 construction commenced before August 17, 1971.

Pulverized coal-fired, dry bottom, tangentially-fired boiler with electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, low nitrogen oxides burners, and selective catalytic reduction (SCR).

Number two fuel oil used for startup and stabilization.

Maximum continuous rating: 5500 mmBtu/hour.

Unit 1 currently vented to Point 03, and will vent to a new stack Point 25 after installation of WFGD.

Control Equipment:

Electrostatic Precipitator

Wet Limestone Forced-Oxidation Sulfur Dioxide Scrubber (WFGD)

Low Nitrogen Oxides Burners

Selective Catalytic Reduction (SCR)

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984) applicable to an emission unit with a capacity of more than 250 mmBtu per hour and commenced before August 17, 1971. This regulation is state-enforceable only until such time as the effective date of an EPA rulemaking, approving this regulation into the federally approved Kentucky State Implementation Plan.

Regulation No. 7, Prevention and control of emissions of particulate matter from combustion of fuel in indirect-heat-exchangers.

401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain provisions.

401 KAR 51:160, NO_x Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.

40 CFR Part 75, Continuous Emissions Monitoring (CEM).

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None.

2. Emission Limitations:

- a. Pursuant to 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.2 lb/mmBtu based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except:
 - i. That a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six minutes in any sixty minutes during building a new fire, cleaning the firebox, or blowing soot.
 - ii. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer or determined by good engineering practices and the time does not exceed the manufacturer's recommendations or good engineering practices.
- c. Pursuant to 401 KAR 61:015, Section 5 (1), sulfur dioxide emissions shall not exceed 5.67 lbs/mmBtu based on a twenty-four-hour average.

3. Testing Requirements:

- a. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.
- b. If no additional stack tests are performed pursuant to Condition 4.b.i., the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.
- c. The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly as specified in Condition 4.a.vi.; daily as specified in Condition 4.b.1; *or* more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a. The following monitoring requirements apply at all times except as indicated pursuant to Condition 4.a.vii.:
 - i. Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference 401 KAR 52:020, Section 10, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.
 - ii. In accordance with 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the Division. The permittee may use the certification from the fuel supplier to satisfy this requirement. The fuel supplier certification shall include the name of the coal supplier and a statement from the coal supplier that the coal complies with the specifications under the definition of coal specified in the regulation.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. In accordance with 401 KAR 61:015, Section 6 (3) the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be determined at least once per week and recorded. The permittee may use the certification from the fuel supplier to satisfy this requirement. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily.
 - iv. Pursuant to material incorporated by reference in 401 KAR 50:020, Section 10, to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shutdown periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.
 - v. Pursuant to material incorporated by reference in 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use an alternate monitoring method/device, a Particulate Matter Continuous Emissions Monitor System (PM-CEMS). The PM-CEMS shall follow the requirements of Performance Specification 11 of 40 CFR Part 60, Appendix B and Procedure 2 of 40 CFR Part 60, Appendix F. As a Phase I Extension Control Unit (a unit with a wet flue gas pollution control system), 40 CFR Part 75.14(b) has exempted the unit from the opacity monitoring requirements, since condensed water is present in the exhaust flue gas stream which impedes the accuracy of opacity measurements. The PM-CEMS shall be installed and operated within one year from the issuance date of this permit.
 - vi. Pursuant to material incorporated by reference in 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a Particulate Matter Continuous Emissions Monitor System (PM-CEMS). PM-CEMS shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous particulate matter monitoring system for accurate measurement, and demonstrating compliance with the applicable Performance Specification 11 of 40 CFR 60, Appendix B. The PM-CEMS shall be installed and operated within one year from the issuance date of this permit. The permittee shall also determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.
 - vii. Pursuant to 401 KAR 61:005, Section 3(5), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.
- b. The following conditions will apply until the PM-CEMS referenced in 4.a.iv. and 4.a.v. has been installed and verified to meet all applicable provisions of Performance Specification 11 of 40 CFR Part 60, Appendix B and Procedure 2 of 40 CFR Part 60, Appendix F, no later than one year after the issuance date of this permit:**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G (a)(21) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.
- ii. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous monitoring system for opacity that shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.
- iii. As an alternative to 4.b.1 and 4.b.2, pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirements for opacity and particulate matter, the permittee shall perform daily opacity observations using EPA Method 9 of 40 CFR 60, Appendix A. This requirement is prescribed as an alternative monitoring procedure in lieu of a continuous opacity monitor (COM) due to the wet plume environment in the exhaust flue gas stream, which prevents collection of representative COM data. One (1) six-minute set of opacity observations shall be performed daily as weather conditions permit. Excluding the startup, and shut down periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and make any necessary repairs. If five (5) percent or greater of Method 9 data (excluding startup, shutdown, and malfunction periods, data averaged over a six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(21) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. CAM Requirements

- i. The permittee shall use Sulfur Dioxide (SO₂) and Nitrogen Oxides (NO_x) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4 (d) for those specific parameters. Within one year of permit issuance, the permittee shall install and operate a Particulate Matter Continuous Emission Monitor (PM-CEMS) as the continuous compliance determination method consistent with 40 CFR 64.4 (d) for PM.

The following conditions will no longer apply after implementation of the PM-CEMS, which must be installed and operated within one year of the issuance date of this permit:

- ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM). The permittee shall conduct this monitoring and fulfill other obligations specified in 40 C.F.R. §§ 64.7 through 64.9.

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.2 lb/mmBtu filterable particulates
	40% Opacity
Monitoring Methods and Location*	(1) Monitoring of the ESP electrical field and other relevant parameters, or (2) visual observation of the stack plume.
Indicator Range	(1) Indicator ranges shall be established by conducting Method 5 testing sufficient to demonstrate correlation between PM/PM ₁₀ emissions and ESP operating parameters, or (2) establish compliance with the PM limit at 40 % opacity. The permittee must conduct daily Method 9 observations to determine the opacity of emissions.
Data Collection Frequency	(1) Continuous control device operating parameters, or (2) daily Method 9 observations.
Averaging Period	(1) Opacity – 6 minute averages, (2) daily Method 9 observations when weather conditions permit.
Recordkeeping	Control device parameters will be maintained for a period of 5 years; visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The Quality Improvement Plan (QIP) threshold for visible emissions is 5 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Electrostatic precipitator monitored parameters will be maintained and operated in accordance with manufacturer recommendations; records of Method 9 certifications will be maintained.

* - No COM data is available due to wet stack conditions.

- d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the time between ignition and the time steady state operation of the emission unit is achieved.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements:**

- a. Records shall be kept in accordance with 401 KAR 61:005, Section 3(16) (f) and 401 KAR 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years.
- b. Pursuant to 401 KAR 61:005 and 401 KAR 61:015, Section 6, the owner or operator of this unit shall maintain a record of applicable measurements, including CEM system, monitoring device, and performance testing measurements; all CEM system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.
- c. Pursuant to KAR 52:020, Section 10 and 401 KAR 50:045, Section 6, the owner or operator shall maintain the results of all compliance tests.
- d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the time of ignition; the time steady state operation of the emission unit is achieved, and shall calculate and record the elapsed time between the two.

6. Specific Reporting Requirements:

- a. Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:
 - i. Owners or operators of facilities required to install continuous monitoring systems or those utilizing fuel sampling and analysis shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
 - ii. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.
 - iii. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.
 - iv. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
 - v. For particulate matter measurements after startup of the PM-CEMS, the summary shall consist of the magnitude in actual pounds per million Btu (lb/mmBtu), rolling 3-hour average of particulate matter greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

period exempted shall be considered before determining the excess average of particulate matter.

- vi. After startup of the PM-CEMS, the permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.

b. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if required by the Division or if triggered per 4. c. 2. Table for EU 01); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- c. In the event of start-up, the permittee shall report:
 - i. The type of start-up (cold, warm, or hot);
 - ii. The reason why the start-up was determined to be cold, warm, or hot (or the conditions that dictated a cold, warm, or hot start-up);
 - iii. The elapsed time of (or duration of) the start-up;
 - iv. The manufacturer's recommended duration for that type of start-up or alternatively, typical, historical durations for that type of start-up based upon good engineering practices; and
 - v. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

- a. The electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, and selective catalytic reduction unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the electrostatic precipitator and wet limestone forced-oxidation sulfur dioxide scrubber shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 02 (01*) - Unit 2 Indirect Heat Exchanger

* - Emission Point 01 will change to Emission Point 03 after installation of WFGD

Description:

Unit 2 construction commenced: prior to September 18, 1978.

Pulverized coal-fired, dry bottom, tangentially-fired boiler with electrostatic precipitator and low nitrogen oxides burners.

Number two fuel oil used for startups and stabilization.

Maximum continuous rating: 5500 mmBtu/hour.

Unit 2 currently vented to Point 01 will vent to existing stack Point 03 after installation of WFGD

Control Equipment:

Electrostatic Precipitator

Low Nitrogen Oxides Burners

Proposed wet limestone flue gas desulfurization (WFGD) unit to be installed between 2005 and 2010

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain provisions.

401 KAR 51:160, NO_x Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.

40 CFR Part 75, Continuous Emissions Monitoring (CEM).

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

The permittee is authorized to operate the source under the Alternate Operating Scenario described in **SECTION H** of this permit provided that all of the conditions of that scenario have been met.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.1 lb/mmBtu based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except:
 - i. For a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes. And/or
 - ii. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer or determined by good engineering practices and the time does not exceed the manufacturer's recommendations or good engineering practices.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/mmBtu based on a three-hour average.
- d. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/mmBtu based on a three-hour average.

3. Testing Requirements:

- a. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.
- b. If no additional stack tests are performed pursuant to Condition 4.b.1., the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.
- c. The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a. The following monitoring requirements apply at all times:
 - i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.
 - ii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.
 - iv. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.
 - v. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.
 - vi. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.
 - vii. All span values computed under 4. above for burning combinations of fuels shall be rounded to the nearest 500 ppm or in accordance with 40 CFR 75, Appendix A.
- b. The following conditions will not apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
- i. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G (a)(21) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.
 - ii. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous monitoring system for opacity that shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.
 - iii. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, a continuous opacity monitor (COM) shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions. The owner or operator shall ensure the COM is in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Pursuant to 401 KAR 59:015, Section 7(3), the COM span values shall be eighty (80), ninety (90), or one-hundred (100) percent.

c. CAM Requirements

- i. The permittee shall use Sulfur Dioxide (SO₂) and Nitrogen Oxides (NO_x) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4 (d) for those specific parameters. Upon implementation of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit, the permittee shall use a Particulate Matter Continuous Emission Monitor (PM-CEMS) as the continuous compliance determination method consistent with 40 CFR 64.4 (d) for PM.

The following conditions will no longer apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:

- ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM). The permittee shall conduct this monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.1 lb/mmBtu filterable particulates
	20% Opacity
Monitoring Methods and Location	(1) Use of a COM at the outlet of the ESP and monitoring of the ESP electrical field and other relevant parameters, or (2) visual observation of the stack plume.
Indicator Range	(1) Use established COM and equipment parameter indicator ranges, including ESP electrical fields, as appropriate, or (2) establish compliance with the PM limit at 20 % opacity. The permittee must conduct weekly stack observations. If visible emissions are abnormal, the permittee must conduct an EPA Reference Method 9 observation to determine the opacity of emissions.
Data Collection Frequency	(1) Continuous COM and control device operating parameters, or (2) weekly observations.
Averaging Period	(1) Opacity – 6 minute averages, or (2) weekly observations.
Recordkeeping	COM data system records and control device parameters will be maintained for a period of 5 years; visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	COM will be maintained and operated in accordance with 401KAR 59:005 / 40CFR 60 Appendix B and/or other requirements as applicable, electrostatic precipitator monitored parameters will be maintained and operated in accordance with manufacturer recommendations; records of Method 9 certifications will be maintained.

- d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the time between ignition and the time steady state operation of the emission unit is achieved.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a. The following requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.
 - ii. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.
 - iii. Pursuant to KAR 52:020, Section 10 and 401 KAR 50:045, Section 6, the owner or operator shall maintain the results of all compliance tests.
- b. The following requirement will no longer apply after startup of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit:

The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.
- c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the time of ignition; the time steady state operation of the emission unit is achieved, and shall calculate and record the elapsed time between the two.

6. Specific Reporting Requirements:

- a. The following reporting requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems, or those utilizing fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- A) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - B) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.
 - C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - D) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - E) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- ii. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:
 - A) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable sulfur dioxide emissions standards.
 - B) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.
- b. The following conditions will no longer apply upon implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
 - i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.
- c. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

 - i. Number of exceedances or excursions;
 - ii. Duration of each exceedance or excursion;
 - iii. Cause of each exceedance or excursion;
 - iv. Corrective actions taken on each exceedance or excursion;
 - v. Number of monitoring equipment downtime incidents;
 - vi. Duration of each monitoring equipment downtime incident;
 - vii. Cause of each monitoring equipment downtime incident;
 - viii. Description of actions taken to implement a quality improvement plan and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.
- d. In the event of start-up, the permittee shall report:
 - i. The type of start-up (cold, warm, or hot);
 - ii. The reason why the start-up was determined to be cold, warm, or hot (or the conditions that dictated a cold, warm, or hot start-up);
 - iii. The elapsed time of (or duration of) the start-up;
 - iv. The manufacturer's recommended duration for that type of start-up or alternatively, typical, historical durations for that type of start-up based upon good engineering practices; and
 - v. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

- a. The electrostatic precipitator, low nitrogen oxides burners, and wet limestone flue gas desulfurization unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the electrostatic precipitator and wet limestone flue gas desulfurization unit shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 03 (02*) - Unit 3 Indirect Heat Exchanger

* - Emission Point 02 will change to Emission Point 03 after installation of WFGD

Description:

Unit 3 construction commenced prior to September 18, 1978.

Pulverized coal-fired unit, dry bottom, wall-fired unit with electrostatic precipitator, low nitrogen oxides burners with overfire air, and selective catalytic reduction (SCR)

Number two fuel oil used for startups and stabilization

Maximum continuous rating: 5500 mmBtu/hour.

Proposed wet limestone flue gas desulfurization (WFGD) unit to be installed between 2005 and 2010

Unit 3 currently vented to Point 02 will vent to existing stack Point 03 after installation of WFGD

Control Equipment:

Electrostatic Precipitator

Low Nitrogen Oxides Burners with Overfire Air

Selective Catalytic Reduction (SCR)

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain Provisions.

401 KAR 51:160, NO_x Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.

40 CFR Part 75, Continuous Emissions Monitoring (CEM).

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

The permittee is authorized to operate the source under the Alternate Operating Scenario described in **SECTION H** of this permit provided that all of the conditions of that scenario have been met.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.1 lb/mmBtu based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except:
 - i. for a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes. And/or
 - ii. for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer or determined by good engineering practices and the time does not exceed the manufacturer's recommendations or good engineering practices.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/mmBtu based on a three-hour average.
- d. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/mmBtu based on a three-hour average.

3. Testing Requirements:

- a. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.
- b. If no additional stack tests are performed pursuant to Condition 4.b.i., the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.
- c. The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a. The following monitoring requirements apply at all times:
 - i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.
 - ii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.
 - iv. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.
 - v. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.
 - vi. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.
 - vii. All span values computed under iv. above for burning combinations of fuels shall be rounded to the nearest 500 ppm or in accordance with 40 CFR 75, Appendix A.
- b. The following conditions will not apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
- i. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(21) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.
 - ii. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous monitoring system for opacity that shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.
 - iii. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, a continuous opacity monitor (COM) shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions. The owner or operator shall ensure the COM is in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Pursuant to 401 KAR 59:015, Section 7(3), the COM span values shall be eighty (80), ninety (90), or one-hundred (100) percent.

c. CAM Requirements

- i. The permittee shall use Sulfur Dioxide (SO₂) and Nitrogen Oxides (NO_x) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4 (d) for those specific parameters. Upon implementation of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit, the permittee shall use a Particulate Matter Continuous Emission Monitor (PM-CEMS) as the continuous compliance determination method consistent with 40 CFR 64.4 (d) for PM.

The following conditions will no longer apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:

- ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM). The permittee shall conduct this monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.1 lb/mmBtu filterable particulates 20% Opacity
Monitoring Methods and Location	(1) Use of a COM at the outlet of the ESP and monitoring of the ESP electrical field and other relevant parameters, or (2) visual observation of the stack plume.
Indicator Range	(1) Use established COM and equipment parameter indicator ranges, including ESP electrical fields, as appropriate, or (2) establish compliance with the PM limit at 20 % opacity. The permittee must conduct weekly stack observations. If visible emissions are abnormal, the permittee must conduct an EPA Reference Method 9 observation to determine the opacity of emissions.
Data Collection Frequency	(1) Continuous COM and control device operating parameters, or (2) weekly observations.
Averaging Period	(1) Opacity – 6 minute averages, or (2) weekly observations.
Recordkeeping	COM data system records and control device parameters will be maintained for a period of 5 years; visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	COM will be maintained and operated in accordance with 401KAR 59:005 / 40CFR 60 Appendix B and/or other requirements as applicable, electrostatic precipitator monitored parameters will be maintained and operated in accordance with manufacturer recommendations; records of Method 9 certifications will be maintained.

- d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the time between ignition and the time steady state operation of the emission unit is achieved.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a. The following requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.
 - ii. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.
 - iii. Pursuant to KAR 52:020, Section 10 and 401 KAR 50:045, Section 6, the owner or operator shall maintain the results of all compliance tests.
- b. The following requirement will no longer apply after implementation of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit:

The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.
- c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the time of ignition; the time steady state operation of the emission unit is achieved, and shall calculate and record the elapsed time between the two.

6. Specific Reporting Requirements:

- a. The following reporting requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems, or those utilizing fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- A) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - B) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.
 - C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility; the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - D) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - E) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- ii. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:
 - A) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.
 - B) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.
- a. The following conditions will no longer apply upon implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
 - i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.
- c. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

 - i. Number of exceedances or excursions;
 - ii. Duration of each exceedance or excursion;
 - iii. Cause of each exceedance or excursion;
 - iv. Corrective actions taken on each exceedance or excursion;
 - v. Number of monitoring equipment downtime incidents;
 - vi. Duration of each monitoring equipment downtime incident;
 - vii. Cause of each monitoring equipment downtime incident;
 - viii. Description of actions taken to implement a quality improvement plan and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.
- d. In the event of start-up, the permittee shall report:
 - i. The type of start-up (cold, warm, or hot);
 - ii. The reason why the start-up was determined to be cold, warm, or hot (or the conditions that dictated a cold, warm, or hot start-up);
 - iii. The elapsed time of (or duration of) the start-up;
 - iv. The manufacturer's recommended duration for that type of start-up or alternatively, typical, historical durations for that type of start-up based upon good engineering practices; and
 - v. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

- a. The electrostatic precipitator, low nitrogen oxides burners, wet limestone flue gas desulfurization unit, and selective catalytic reduction unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the electrostatic precipitator and wet limestone flue gas desulfurization unit shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 04 (02*) - Unit 4 Indirect Heat Exchanger

* - Emission Point 02 will change to Emission Point 26 after installation of WFGD

Description:

Unit 4 construction commenced prior to September 18, 1978.

Pulverized coal-fired unit, dry bottom, wall-fired boiler, with electrostatic precipitator, low nitrogen oxides burners, and selective catalytic reduction (SCR).

Number two fuel oil used for startups and stabilization.

Maximum continuous rating: 5500 mmBtu/hour.

Proposed wet limestone flue gas desulfurization (WFGD) unit to be installed between 2005 and 2010

Unit 4 currently vented to Point 02 will vent to a new stack Point 26 after installation of WFGD.

Control Equipment:

Electrostatic Precipitator

Low Nitrogen Oxides Burners with Overfire Air

Selective Catalytic Reduction (SCR)

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 mmBtu/hour and commenced after August 17, 1971.

401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain Provisions.

401 KAR 51:160, NO_x Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.

40 CFR Part 75, Continuous Emissions Monitoring (CEM).

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

The permittee is authorized to operate the source under the Alternate Operating Scenario described in **SECTION H** of this permit provided that all of the conditions of that scenario have been met.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.1 lb/mmBtu based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.
- c. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer or determined by good engineering practices and the time does not exceed the manufacturer's recommendations or good engineering practices.
- d. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/mmBtu based on a three-hour average.
- e. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/mmBtu based on a three-hour average.

3. Testing Requirements:

- a. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.
- b. If no additional stack tests are performed pursuant to Condition 4.b.i., the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.
- c. The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

- a. The following monitoring requirements apply at all times:
 - i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.
 - ii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.
 - iv. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.
 - v. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.
 - vi. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.
 - vii. All span values computed under iv. above for burning combinations of fuels shall be rounded to the nearest 500 ppm or in accordance with 40 CFR 75, Appendix A.
- b. The following conditions will not apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
- i. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(21) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.
 - ii. Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous monitoring system for opacity that shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.
 - iii. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, a continuous opacity monitor (COM) shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions. The owner or operator shall ensure the COM is in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Pursuant to 401 KAR 59:015, Section 7(3), the COM span values shall be eighty (80), ninety (90), or one-hundred (100) percent.

c. CAM Requirements

- i. The permittee shall use Sulfur Dioxide (SO₂) and Nitrogen Oxides (NO_x) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4 (d) for those specific parameters. Upon implementation of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit, the permittee shall use a Particulate Matter Continuous Emission Monitor (PM-CEMS) as the continuous compliance determination method consistent with 40 CFR 64.4 (d) for PM.

The following conditions will no longer apply after implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:

- ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM). The permittee shall conduct this monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.1 lb/mmBtu filterable particulates
	20% Opacity
Monitoring Methods and Location	(1) Use of a COM at the outlet of the ESP and monitoring of the ESP electrical field and other relevant parameters, or (2) visual observation of the stack plume.
Indicator Range	(1) Use established COM and equipment parameter indicator ranges, including ESP electrical fields, as appropriate, or (2) establish compliance with the PM limit at 20 % opacity. The permittee must conduct weekly stack observations. If visible emissions are abnormal, the permittee must conduct an EPA Reference Method 9 observation to determine the opacity of emissions.
Data Collection Frequency	(1) Continuous COM and control device operating parameters, or (2) weekly observations.
Averaging Period	(1) Opacity – 6 minute averages, or (2) weekly observations.
Recordkeeping	COM data system records and control device parameters will be maintained for a period of 5 years; visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	COM will be maintained and operated in accordance with 401KAR 59:005 / 40CFR 60 Appendix B and/or other requirements as applicable, electrostatic precipitator monitored parameters will be maintained and operated in accordance with manufacturer recommendations; records of Method 9 certifications will be maintained.

- d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the time between ignition and the time steady state operation of the emission unit is achieved.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements:**

- a. The following requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.
 - ii. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.
 - iii. Pursuant to KAR 52:020, Section 10 and 401 KAR 50:045, Section 6, the owner or operator shall maintain the results of all compliance tests.
- b. The following requirement will no longer apply after implementation of the Alternate Operating Scenario specified for this emission unit under **SECTION H** of this permit:

The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.
- c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the time of ignition; the time steady state operation of the emission unit is achieved, and shall calculate and record the elapsed time between the two.

6. Specific Reporting Requirements:

- a. The following reporting requirements apply at all times:
 - i. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems, or those utilizing fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- A) The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - B) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.
 - C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - D) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - E) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- ii. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:
- A) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable sulfur dioxide emissions standards.
 - B) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.
- b. The following conditions will no longer apply upon implementation of the Alternate Operating Scenario specified for this emission unit in **SECTION H** of this permit:
- i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

- c. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
 - ii. Duration of each exceedance or excursion;
 - iii. Cause of each exceedance or excursion;
 - iv. Corrective actions taken on each exceedance or excursion;
 - v. Number of monitoring equipment downtime incidents;
 - vi. Duration of each monitoring equipment downtime incident;
 - vii. Cause of each monitoring equipment downtime incident;
 - viii. Description of actions taken to implement a quality improvement plan and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.
- d. In the event of start-up, the permittee shall report:
 - i. The type of start-up (cold, warm, or hot);
 - ii. The reason why the start-up was determined to be cold, warm, or hot (or the conditions that dictated a cold, warm, or hot start-up);
 - iii. The elapsed time of (or duration of) the start-up;
 - iv. The manufacturer's recommended duration for that type of start-up or alternatively, typical, historical durations for that type of start-up based upon good engineering practices; and
 - v. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

- a. The electrostatic precipitator, low nitrogen oxides burners, wet limestone flue gas desulfurization unit, and selective catalytic reduction unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the electrostatic precipitator and wet limestone flue gas desulfurization unit shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 05-01 (06) - Coal Receiving Operations

Description:

Construction commenced: prior to November 15, 1973

Equipment includes: barge unloading operations

(Barge unloader itself is not enclosed)

Maximum Operating Rate: 3600 tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal received (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 05-02 (10) - Limestone Handling and Receiving

Description:

Construction commenced: 1992

Equipment includes: Barge unloading operations

(Barge unloader itself is not enclosed)

Maximum Operating Rate (Receiving): 1800 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone received (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 06 (09) - Coal crushing operations (crusher #1)

Description:

Crusher #1 construction commenced: before October 24, 1974

Equipment includes: two crushers and one surge bin

Maximum Operating Rate: 1800 tons/hour

Control Equipment:

Enclosure and Baghouse

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations, for emissions unit commenced before July 2, 1975.
40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 61:020, Section 3(2), particulate matter emissions into the open air shall not exceed $[55 (P)^{0.11} - 40]$ pounds per hour based on a three-hour average where P is the hourly operating rate in tons per hour.
- b. Pursuant to 401 KAR 61:020, Section 3(1)(a), any continuous emission(s) into the open air shall not equal or exceed forty (40) percent opacity based on a six-minute average.

3. Testing Requirements:

- a. The permittee shall use EPA Reference Method 9 to determine the opacity of emissions from each stack which shall be performed no less frequently than weekly.
- b. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making any necessary repairs.
- b. The permittee shall monitor the operating rate and hours of operation.
- c. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	(55(P) ^{0.11} – 40) pounds per hour filterable particulates
	40% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate and hours of operation.
Indicator Range	For Emission Unit 6, the indicator range shall be visible emissions (opacity) greater than 40 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnages) and hours of operation.

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. c. ii. Table of EU 06 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

b. See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The enclosures and baghouse shall be used and operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the enclosures and baghouse shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 07 (07 and 08) - Coal handling operations (conveying operations and stockpile)

Description:

Construction commenced: before October 24, 1974

Equipment includes: (below)

<u>Operation</u>	<u>Maximum Operating Rate (Tons/hour)</u>
Conveyors 1D, 1E, 1F and Transfer Points	3600 each
Conveyor 1J, and Transfer Points	900 each
Conveyor 1G, and Transfer Points	1500 each
Conveyors 1H, and Transfer Points	1800 each
Stockpile Operations	3600

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnage).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures, and wet suppression) shall be used to maintain compliance with the applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and use of the air pollution control equipment (including but not limited to enclosures, and wet suppression) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 08-01 (07) - Coal Conveying and Handling Operations

Description:

Construction commenced: before October 24, 1974

Equipment includes: Conveyors 1A, 1B, 1C, and transfer points

Maximum Operating Rate: 3600 tons/hour, each

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

See Section F.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnage).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 08-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 1A, 1B, 1C, and transfer points

Construction commenced: 1992

Maximum Operating Rate: 1800 Tons per hour, each

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants, incorporated by reference 40 CFR 60.670, Subpart OOO applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, for particulate emissions concentration from the unit, the owner(s) or operator(s) shall use EPA Reference Method 5 or 17.
- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- c. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis and maintain a log of the observations. If visible emissions from any unit are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and initiate an inspection of the unit equipment and make any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 8-02, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

Records of the limestone (tonnages) processed shall be maintained.

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 08-02 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 09-01 (07) - Coal Conveying and Handling Operations

Description:

Equipment includes: Conveyor 2H and transfer points

Construction commenced before 1977 (operational in 1977)

Maximum Operating Rate: 1800 tons/hour

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60.250, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

3. Testing Requirements:

Pursuant to 40 CFR 60.254, EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each unit on a weekly basis and maintain a log of the observations. If visible emissions from any unit are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and initiate an inspection of the equipment and make any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnages).

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 09-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 2H and transfer points

Construction commenced: 1992

Operating rate: 1800 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants, incorporated by reference 40 CFR 60.670, Subpart OOO applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, for particulate emissions concentration from the unit, the owner(s) or operator(s) shall use EPA Reference Method 5 or 17.
- c. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- c. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each transfer point on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and initiate an inspection of the equipment and make any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 9-02, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 09-02 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 10-01 (07) - Coal Handling and Conveying

Description:

Equipment includes: Conveyor 6H and transfer points
Construction commenced before 1981 (operational in 1981)
Maximum Operating Rate: 1800 tons/hour

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60.250, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

3. Testing Requirements:

Pursuant to 40 CFR 60.254, EPA Reference Method 9 shall be used to determine opacity upon requested by the Division.

4. Specific Monitoring Requirements:

The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each transfer point on a weekly basis and maintain a log of the observations. If visible emissions from any transfer point are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and initiate an inspection of the unit and make any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnages).

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 10-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 6H and transfer points

Construction commenced: 1992

Maximum Operating Rate: 1800 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, for particulate emissions concentration from the unit, the owner(s) or operator(s) shall use EPA Reference Method 5 or 17.
- d. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- c. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The owner or operator shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the owner or operator shall determine the opacity of emissions by Reference Method 9 and initiate an inspection of the control equipment making any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 10-02, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekly) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 10-02 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emissions Unit: 11 (07 and 09) - Coal Handling and Conveying****Description:**

Construction commenced before 1981 (operational in 1981),

Except, conveyor 2J construction commenced before 1977 (operational in 1977)

Equipment includes: (below)

<u>Operation</u>	<u>Maximum Operating Rate (Tons/hour)</u>
Crusher House #2 (one crusher with two surge bins)	1800
Conveyors 2J, 3J, 4J, 3M, 4M and Transfer Points	900 each
Conveyors 2G, and Transfer Points	1500 each
Conveyors 5G, 6G, 7G, 8G, 3H, 4H, 5H, Coal Silo, and Transfer Points	1800 each
Conveyors 3G, 4G and Transfer Points	2400 each

Control Equipment:

Enclosures and Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60.250, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

3. Testing Requirements:

- b. Pursuant to 40 CFR 60.254, EPA Reference Method 9 shall be used to determine opacity at least weekly, or more frequently if requested by the Division.
- b. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	20% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 11, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 20 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the coal processed (tonnage).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 11 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

b. See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures and fabric filters) shall be used to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 12 (11) - Limestone Handling and Processing

Description:

Construction commenced: 1992

Equipment includes: Conveyor BF1 and transfer points

Maximum Operating Rate: 140 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance nonmetallic mineral processing plants, incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- b. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 12, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 12 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 13 (14) - Limestone Crushing and Processing

Description:

Construction commenced: 1992

Equipment Includes: Hammermill crushing operations

Maximum Operating Rate: 140 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- b. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 13, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 13 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 14 (11) - Limestone Handling and Conveying

Description:

Construction commenced: 1992

Equipment includes: Conveyor L1 and transfer points

Maximum Operating Rate: 140 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

40 CFR Part 64, Compliance Assurance Monitoring (CAM).

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least annually, or more frequently if requested by the Division.
- b. The permittee shall submit a schedule within six months from the effective date of this permit and conduct performance testing for particulate matter emissions within the first year of this permit.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b. CAM Requirements
 - i. The permittee shall conduct the monitoring and fulfill other obligations specified in C.F.R. §§ 64.7 through 64.9.
 - ii. Pursuant to 40 CFR 64.6, the table below shows the monitoring approach for Particulate Matter (PM).

TABLE: MONITORING APPROACH

Applicable CAM Requirement	PM/PM ₁₀ limits
General Requirements	0.05 g/dscm filterable particulates
	7% Opacity
Monitoring Methods and Location	The Ghent Generating Station will conduct daily (weekday) qualitative visual observations of emissions and monitoring of the operating rate.
Indicator Range	For Emission Unit 14, (1) source testing to establish equipment parameter indicator ranges, including the baghouse pressure drop, as appropriate or (2) the indicator range shall be visible emissions (opacity) greater than 7 percent based on a 6-minute average. The permittee must conduct daily (weekday) stack observations. If visible emissions are observed to be abnormal, the permittee must conduct a Method 9 observation to determine the opacity of the emissions
Data Collection Frequency	Daily (weekday) observations
Averaging Period	Method 9 Observations – 6 minutes
Recordkeeping	Visible observation records and Method 9 observations will be maintained for a period of 5 years.
QA/QC	The QIP threshold for visible emissions is 4 excursions in a 6-month reporting period. This level is 3 percent of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP shall be developed and implemented. Records of Method 9 certifications will be maintained.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

a. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan (if triggered per 4. b. ii. Table of EU 14 or if required by the Division); and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

- b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 15 (13) - Limestone Handling Day Silo

Description:

Construction commenced: 1992

Equipment includes: Limestone day silo receiving and processing

Maximum Operating Rate: 140 Tons per hour

Control Equipment:

Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:
 - i. Contain particulate matter in excess of 0.05 g/dscm; or
 - ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

- a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 shall be used to determine opacity at least weekly, or more frequently if requested by the Division.
- b. EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The fabric filter shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 16 (15) - Limestone Secondary Crushing Operations

Description:

Construction commenced: 1992

Equipment includes: two ball mills secondary crushing operations

Maximum Operating Rate: 28.6 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(c), EPA Reference Method 9 shall be used to determine opacity at least weekly, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 17 (12) - Limestone Handling Stockpile Operations

Description:

Construction commenced: 1992

Maximum Operating Rate: 1800 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control measures (including but not limited to wet suppression) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and use of the air pollution control measures (including but not limited to wet suppression) shall be maintained
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 22 (-) - Two Cooling Towers

Description:

Construction commenced: prior to 1992

<u>Tower Number</u>	<u>Maximum Operating Rate (Gallons per Minute)</u>
3	172,000
4	172,000

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

5. Specific Recordkeeping Requirements:

Records of the water circulation rates shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

NA

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 25 (16) - Limestone Handling and Receiving

Description:

Construction commenced: proposed 2005 - 2010

Equipment includes: Barge unloading operations

(Barge unloader itself is not enclosed)

Maximum Operating Rate (Receiving): 1000 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

See Section F.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone received (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 26 (17) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors LS-1, LS-2, and transfer points

Construction commenced: Proposed 2005 - 2010

Maximum Operating Rate: 1000 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporating by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 (c) shall be used for determining opacity, annually.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 27 (18) - Limestone Handling Stockpile Operations

Description:

Equipment includes: Limestone Storage Pile LSP1

Construction commenced: 2005 - 2010

Maximum Operating Rate: 1000 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control measures (including but not limited to wet suppression) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and use of the air pollution control measures (including but not limited to wet suppression) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 28 (17) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors LS-3, LS-4, and transfer points

Construction commenced: Proposed 2005 - 2010

Maximum Operating Rate: 100 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporating by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 (c) shall be used for determining opacity, annually.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 29 (19) - Limestone Handling and Processing

Description:

Equipment includes: Wet limestone sizing screen 1 and 2, wet limestone mill 1 and 2, and transfer points.

Construction commenced: Proposed 2005 - 2010

Maximum Operating Rate: 100 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(h)(1), no owner or operator shall cause to be discharged into the atmosphere any visible emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyers that process saturated material in the production line up to the next crusher, grinding mill or storage bin.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, the owner(s) or operator(s) shall determine fugitive emissions while all emissions units are operating in accordance with EPA Reference Method 22.

4. Specific Monitoring Requirements:

The permittee shall inspect the equipment on a weekly basis and maintain a log of the observations and corrections.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 30 (20) - Limestone Handling and Processing

Description:

Equipment includes: Limestone crusher 1 and 2

Construction commenced: Proposed 2005 - 2010

Maximum Operating Rate: 100 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(c), no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than fifteen (15) percent opacity.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 (c) shall be used for determining opacity, annually.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 31 (21) - Gypsum Handling and Processing

Description:

Equipment includes: Wet gypsum conveyor 1 and 2, and transfer points.

Construction commenced: Proposed 2005 – 2010

Maximum Operating Rate: 375 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60.670, incorporating by reference 40 CFR 60.672 (b), the owner(s) or operator(s) shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(h)(1), no owner or operator shall cause to be discharged into the atmosphere any visible emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyers that process saturated material in the production line up to the next crusher, grinding mill or storage bin.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 (c) shall be used for determining opacity, annually.

In determining compliance with 401 KAR 60:670, the owner(s) or operator(s) shall determine fugitive emissions while all emissions units are operating in accordance with EPA Reference Method 22.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the gypsum processed (tonnages).

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 32 (22) - Gypsum Handling Stockpile Operations

Description:

Equipment includes: Gypsum Storage Pile GSP1

Construction commenced: Proposed 2005 - 2010

Maximum Operating Rate: 375 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the gypsum processed (tonnages).

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control measures (including but not limited to wet suppression) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance and use of the air pollution control measures (including but not limited to wet suppression) shall be maintained
- c. See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 33 (23) - Gypsum Handling and Processing

Description:

Equipment includes: Wet gypsum conveyer 3, 4, and 5, and transfer points.

Construction commenced: Proposed 2005 – 2010

Maximum Operating Rate: 375 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

In determining compliance with 401 KAR 60:670, incorporating by reference 40 CFR 60.672, EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 (c) shall be used for determining opacity, annually.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each unit on a daily basis during weekdays and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity emissions by Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the gypsum processed (tonnages).

6. Specific Reporting Requirements:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

- a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.
- b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
- c. See Section E for further requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and qualitative visible emission evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any conservative actions taken for any abnormal visible emissions.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. The following fuel oil storage tanks: 525,000 gallons 100,000 gallons 20,000 gallons 12,000 gallons 1000 gallons three 500 gallon tanks two 150 gallon tanks.	None
2. 1000 gallon unleaded gasoline storage tank	401 KAR 59:050
3. The following lubricating oil storage tanks: four 15,000 gallon tanks four 11,500 gallon tanks.	None
4. Emergency electrical generator.	None
5. Sodium sulfate injection system	401 KAR 61:020 or
6. Infrequent evaporation of boiler cleaning solutions.	401 KAR 59:010
7. Paved and unpaved roadways	401 KAR 63:010
8. Infrequent burning of deminimis quantities of used oil for energy recovery.	
9. Cooling towers 1 and 2:	401 KAR 63:010

<u>Tower Number</u>	<u>Maximum Operating Rate</u> <u>(Gallons per Minute)</u>
1	191,000
2	197,000

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>	<u>Generally Applicable Regulations</u>
10. E Belt extension (fuel blending)	401 KAR 63:010
11. Limestone slurry transfer from slurry tanks to scrubbers	401 KAR 59:010
12. Gypsum storage pile	401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. PM, PM₁₀, SO₂, NO_x and visible emissions (opacity) as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter 1, or by a test method specified in the approved state implementation plan. Compliance with the visible emissions limitations for the indirect heat exchangers (emissions unit 01, 02, 03, and 04) shall be determined using continuous opacity monitoring data, continuous particulate monitoring data, visual observations, and Reference Method 9 as applicable.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive,
Suite 110
Florence, KY 41042

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.***
6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit contained in Section J of this document and the Phase II permit application (including the Phase II NO_x compliance plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permit shield, as provided in Section G, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

Alternate Operating Scenario

Affected Sources:

Emissions Unit: 02 (01*) - Unit 2 Indirect Heat Exchanger

* - Emission Point 01 will change to Emission Point 03 after installation of WFGD

Emissions Unit: 03 (02*) - Unit 3 Indirect Heat Exchanger

* - Emission Point 02 will change to Emission Point 03 after installation of WFGD

Emissions Unit: 04 (02*) - Unit 4 Indirect Heat Exchanger

* - Emission Point 02 will change to Emission Point 26 after installation of WFGD

This Alternate Operating Scenario provides for the use of an alternative monitoring device to fulfill the periodic monitoring requirements for opacity and particulate matter under 401 KAR 52:020, Section 10. This Alternate Operating Scenario does not cover monitoring requirements for SO₂ or NO_x emissions. Monitoring requirements applicable to SO₂ and NO_x emissions from the affected units listed above shall be fulfilled in accordance with the requirements listed in **Section B** of this permit. The permittee has proposed to install a wet limestone flue gas desulfurization (WFGD) unit for control of SO₂ emissions. Due to condensed water vapor resulting from the wet plume environment that will be present when the WFGD is in operation, the accuracy of opacity measurements is impeded. In lieu of an opacity monitor, the permittee has proposed to fulfill the periodic monitoring requirements for opacity and particulate matter by installing a Particulate Matter Continuous Monitoring System (PM-CEMS).

1. Operating Limitations:

- a. The permittee is authorized to operate under this scenario only when the following conditions have been met for each affected unit:
 - i. The permittee informs the Division, in writing, of their intent to change from using a continuous monitoring system for opacity to a continuous monitoring system for particulate matter;
 - ii. Compliance with the applicable requirements of Performance Specification 11 of 40 CFR Part 60, Appendix B and Procedure 2 of 40 CFR Part 60, Appendix F has been demonstrated under this scenario; and
 - iii. The permittee has received written confirmation and authorization from the Division for the change.

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- b. Under this scenario, should the permittee be unable to maintain compliance with all other limits, conditions and compliance demonstrations described in this section, the permittee shall revert to operating under the requirements listed in **SECTION B** of this permit for particulate matter and opacity.

2. **Emission Limitations:** See **SECTION B**

3. **Testing Requirements:** See **SECTION B**

4. **Specific Monitoring Requirements:**

- a. Pursuant to material incorporated by reference in 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use an alternate monitoring method/device, a Particulate Matter Continuous Emissions Monitor System (PM-CEMS). The PM-CEMS shall follow the requirements of Performance Specification 11 of 40 CFR Part 60, Appendix B and Procedure 2 of 40 CFR Part 60, Appendix F.
- b. Pursuant to material incorporated by reference in 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a Particulate Matter Continuous Emissions Monitor System (PM-CEMS). PM-CEMS shall conform to requirements of this section, which include installing, calibrating, operating, and maintaining the continuous particulate matter monitoring system for accurate measurement, and demonstrating compliance with the applicable Performance Specification 11 of 40 CFR 60, Appendix B. The PM-CEMS shall be installed and operated within one year from the issuance date of this permit for Unit 1. For Units 2, 3, and 4, the PM-CEMS may be installed and operated when the emissions from these units are switched from the existing emission points to the new emission points; however, the PM-CEMS may be installed at an earlier date (to the existing stack/emission point) and then moved to the new stack/emission point. The permittee shall also determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.
- c. CAM Requirements

The permittee shall use Sulfur Dioxide (SO₂), Nitrogen Oxides (NO_x), and Particulate Matter (PM) Continuous Emissions Monitors (CEMs) as continuous compliance determination methods consistent with 40 CFR 64.4 (d) for those specific parameters.

5. **Specific Recordkeeping Requirements:** See **SECTION B**

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**6. Specific Reporting Requirements:**

- a. Excess emissions for emission units using a continuous monitoring system for measuring particulate matter are defined any rolling 3-hour average of particulate matter, in units of pounds per million Btu (lb/mmBtu), greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter.
- b. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.
- c. CAM Reporting Requirements

Pursuant to 40 C.F.R. §64.9(a) the permittee shall report the following information regarding its CAM Plan according to the general reporting requirements specified in Section F.5. of this permit:

- i. Number of exceedances or excursions;
- ii. Duration of each exceedance or excursion;
- iii. Cause of each exceedance or excursion;
- iv. Corrective actions taken on each exceedance or excursion;
- v. Number of monitoring equipment downtime incidents;
- vi. Duration of each monitoring equipment downtime incident;
- vii. Cause of each monitoring equipment downtime incident;
- viii. Description of actions taken to implement a quality improvement plan; and upon completion of the quality improvement plan, documentation that the plan was completed and reduced the likelihood of similar excursions or exceedances.

7. Specific Control Equipment Operating Conditions: See SECTION B

SECTION I - COMPLIANCE SCHEDULE

None

SECTION J – ACID RAIN

TITLE IV PHASE II ACID RAIN

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NO_x Compliance Plan.
- 5) Summary of Actions

1• Statement of Basis:

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR 76.

SECTION J – ACID RAIN (CONTINUED)**PERMIT (Conditions)**

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 01

2. SO₂ Allowance Allocations and NO_x Requirements for the affected unit:

SO ₂ Allowances	Year				
	2005	2006	2007	2008	2009
Tables 2, 3 or 4 of 40 CFR 73	12,248*	12,248*	12,248*	12,248*	12,248*

NO _x Requirements	
NO_x Limits	<p>(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NO_x emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.45 lb/mmBtu.</p> <p>(ii) Under this plan, the actual Btu-weighted annual average NO_x emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.</p> <p>If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i).</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.</p>

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84)

SECTION J – ACID RAIN (CONTINUED)**PERMIT (Conditions)**

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 02

• **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2005	2006	2007	2008	2009
Tables 2, 3 or 4 of 40 CFR 73	12,734*	12,734*	12,734*	12,734*	12,734*

NO _x Requirements	
NO_x Limits	<p>(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NO_x emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/mmBtu.</p> <p>(ii) Under this plan, the actual Btu-weighted annual average NO_x emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.</p> <p>If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i).</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.</p>

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)**PERMIT (Conditions)**

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 03

• **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2005	2006	2007	2008	2009
Tables 2, 3 or 4 of 40 CFR 73	13,956*	13,956*	13,956*	13,956*	13,956*

NO _x Requirements	
NO_x Limits	<p>(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NO_x emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.46 lb/mmBtu.</p> <p>(ii) Under this plan, the actual Btu-weighted annual average NO_x emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.</p> <p>If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i).</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.</p>

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)**PERMIT (Conditions)**

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 04

• **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2005	2006	2007	2008	2009
Tables 2, 3 or 4 of 40 CFR 73	13,713*	13,713*	13,713*	13,713*	13,713*

NO _x Requirements	
NO_x Limits	<p>(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NO_x emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.46 lb/mmBtu.</p> <p>(ii) Under this plan, the actual Btu-weighted annual average NO_x emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7.</p> <p>If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i).</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p> <p>In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.</p>

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)

3. Comments, Notes, and Justifications:

Affected units are two (2) tangentially fired and two (2) wall-fired dry-bottom boilers.

4. Permit Application: Attached

The Phase II Permit Application, the Phase II NO_x Compliance Plan, and the Phase II NO_x Averaging Plan are all part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application, the Phase II NO_x Compliance Plan, and the Phase II NO_x Averaging Plan.

5. Summary of Actions:

Previous Actions:

1. Draft Phase II Permit ((# AR-96-14) including SO₂ compliance plan was issued for public comment on September 19, 1996.
2. Final Phase II Permit (# AR-96-14) including SO₂ compliance plan was issued on December 11, 1996.
3. Draft Phase II Permit (# A-98-016) was issued with the 1998 revised SO₂ allowance allocations and NO_x emissions standard for public comment on December 4, 1998.
4. Final Phase II Permit (# A-98-016) was issued with the 1998 revised SO₂ allowance allocations and NO_x emissions standard was issued on March 9, 1999.

Present Action:

1. Draft revised Title V with Acid Rain Permit (V-05-043) is being advertised for public comments.

SECTION K – NO_x BUDGET PERMIT

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NO_x requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The original NO_x Budget Permit application and Form DEP7007EE for these electrical generating units were submitted to the Division and received on October 30, 2001 and November 4, 2004, respectively. Requirements contained in that application are hereby incorporated into and made part of this NO_x Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected units are two (2) pulverized coal-fired, dry bottom, tangentially-fired boilers and two (2) pulverized coal-fired, dry bottom, wall-fired boilers. Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal and fuel oil as fuel source, and are authorized as base load electric generating units.

4) Summary of Actions

The NO_x Budget Permit is being issued as part of this revised Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100

ATTACHMENT A

NO_x BUDGET PERMIT APPLICATION